REMARKS/ARGUMENTS

This Amendment is responsive to the Office Action mailed August 5, 2010.

Claim Rejections – 35 USC § 103

In the Office Action, former claims 1–2, 5, 7–12, 14, 17, 20–23, 25–26, 29, 32, 35–36, 38, 42, 44–47, 49–50, 53, 56–60, 62, 66, 68–71, 73–74, 77, 79–81, 84–86, 91, 93–94, 96–97, 101–102, 105–106, 111–112, 115–118, 122 and 124–130 were rejected under 35 USC § 103(a) as being unpatentable over Christopoulos et al. (US 2001/0047517; hereinafter "Christopoulos") in view of Kost et al. (US 2002/0154691; hereinafter "Kost") Short et al. (US 6,789,110; hereinafter "Short") and Mantha et al. (US 2004/0023622; hereinafter "Mantha"). In addition, claims 3–4, 24, 27–28, 48, 51–52, 72, 75–76, 88–90, 98–100, 108–110 and 119–121 were rejected under 35 USC § 103(a) as being unpatentable over Christopoulos, Kost, and Short, and Mantha, and in further view of Vetro et al. (US 2004/0203851; hereinafter "Vetro").

Claims 6, 30, 54 and 78 were rejected under 35 USC § 103(a) as being unpatentable over Christopoulos, Kost, Short and Mantha as applied to claims 2, 26, 50 and 74 above, and in view of Wang et al. (US 2002/0152317; hereinafter "Wang"). Claims 13, 15, 37, 39–40, 61, and 63–64 were rejected under 35 USC § 103(a) as being unpatentable over Christopoulos, Kost, Short and Mantha, and in further view of Anand et al. (US 6,920,179; hereinafter "Anand"). Claims 18, 43 and 67 were rejected under 35 USC § 103(a) as being unpatentable over Christopoulos, Kost, Short and Mantha as applied to claims 1, 42, and 66 in view of Patterson (US 6,018,369; hereinafter "Patterson") and Tsukagoshi (US 5,731,847; hereinafter "Tsukagoshi"). Claims 92 and 123 were rejected under 35 USC § 103(a) as being unpatentable over Christopoulos, Kost, Short and Mantha as applied to claims 14, 38, 62, 81, and 112.

Applicant respectfully traverses each of these rejections. In each instance, the applied references fail to disclose or suggest the techniques defined by Applicant's claims, and provide no teaching that would have suggested an apparent reason for a person of ordinary skill in the art to arrive at the claimed techniques.

For example, Chrtopoulos in view of Kost, Short and Mantha fails to teach or suggest an encoder system included within the wireless service provider equipment for selectively re-encoding the received stream, as required by claim 1. Instead, Christopolous

discloses techniques that always re-encode multimedia data. For example, consider the following reproduction of FIG. 3 of Christopoulos:

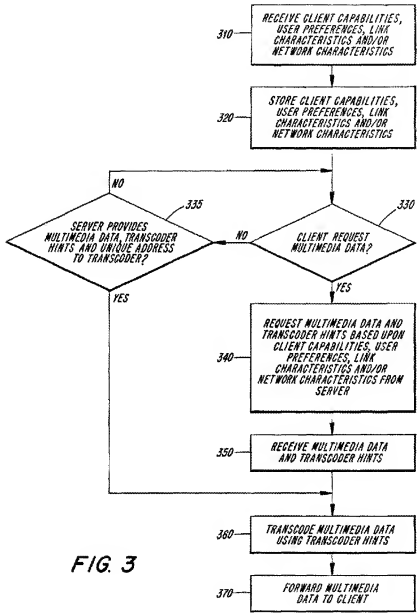


FIG. 3

In the above reproduced FIG. 3, the Christopoulos system always transcodes the multimedia data using transcoder hints in accordance with block 360. There is no block preceding block 360 in the flowchart of FIG. 3 that even so much as suggests a decision blocks with respect to whether or not to transcode the multimedia data. To the contrary, if there is multimedia data and transcoder hints, the Christopoulos system transcodes the multimedia data. If there has been no client request for multimedia data, then there is no reason to

transcode. If the hints are not available, the Christopoulos system requests the hints. In all instances, the Christopoulos system transcodes the multimedia data so long as multimedia data is present to transcode. This is exactly opposite of the feature of claim 1 requiring an encoder system included within the wireless service provider equipment **for selectively re-encoding** the received stream.

None of the portions of Kost, Short and Mantha on which the Office Action relies in rejecting this feature of claim 1 overcome this deficiency of Christopoulos. Consequently, the combination resulting from Christopoulos in view of Kost, Short and Mantha fails to teach or suggest this feature of claim 1 requiring an encoder system included within the wireless service provider equipment for selectively re-encoding the received stream.

In rejecting this feature of claim 1, the Office Action indicates that paragraphs [0007], [0035], [0037], [0038], [0046] and FIGS. 1-3 (specifically citing items 350 and 360 of FIG. 3) disclose this feature of claim 1. Applicant can find nothing in any of these cited portions of Christopoulos to even so much as suggest this feature of claim 1 directed to selectively re-encoding the received stream. Instead, as noted above, FIG. 3 unconditionally or always transcodes the multimedia data as indicated by block or item 360. The Office Action is apparently reading out the term "selectively" when construing this feature of claim 1. This is improper.

As another example, Christopoulos in view of Kost, Short and Mantha fails to teach or suggest the plurality of encoding parameter sets also required by claim 1. Particularly, these applied references fail to teach or suggest that these encoding parameter sets include a first encoding parameter set for encoding only a first type of the plurality of types of data, a second encoding parameter set for encoding only a second type of the plurality of types of data different from the first type, a third encoding parameter set for encoding only a third type of the plurality of types of data different from the first and second types and a fourth encoding parameter set for encoding multiple types of the plurality of types of data, as set out explicitly in claim 1.

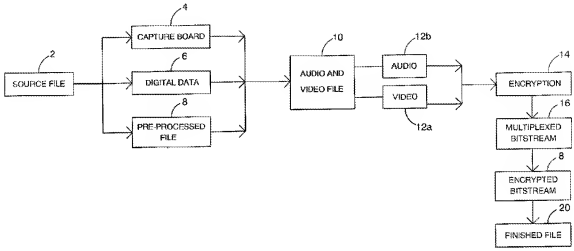
Instead, Christopoulos discloses transcoding different types of multimedia data and so-called hints for performing this transcoding of the different types of multimedia data. Even if these so-called transcoder hints may be properly construed as encoding parameter sets required by Applicant's claim 1 (an assertion to which Applicant also disagrees)

Christopoulos only provides for the use of two different types of transcoder hints. Accordingly, nothing in Christopoulos suggests anything similar to the use of four different encoding parameter sets, as required by claim 1. The Office Action agrees on this point, noting in the rejection of this feature of claim 1 that "while Christopoulos states slecting multiple different parameter sets to encode two different types of multimedia data ... Christopoulos does not explicitly state the use of a three [sic] parameter sets for encoding three different data type [sic] or an encoding parameter set for encoding multiple types of the plurality of types of data."

To overcome this deficiency of Christopoulos, the Office Action cites to Kost, alleging that Kost discloses an encoding set to encode audio data ... and an encoding set to encode both video and audio data." The Office Action supports this allegation by referring to paragraphs [0079], [0080], [0084] and FIG. 1 of Kost. However, the Office Action relies on an improper construction of these paragraphs of Kost. As explained below, when these paragraphs of Kost are properly construed, the resulting combination of Chritopoulos in view of Kost, Short and Mantha does not teach or suggest this feature of claim 1 directed to four different parameter sets.

Paragraph [0079] of Kost describes how a pre-authoring program may be used to "grab" the output from the capture board. The media application, according to this paragraph of Kost, may then be used to acquire the uncompressed audio-video files. Paragraph [0079] continues to state that a desired transfer rate may be selected and, once selected, the encoding processes may be initiated. Paragraph [0080] of Kost merely elaborates on this encoding process by stating that the encoding process may act like a filter to reduce overall file size and subsequent transfer rates. Paragraph [0084] of Kost suggests that "in addition to the video, the audio ***12b*** may be encoded." (Emphasis in original)

Applicant is unsure as to why the Office Action cites paragraphs [0079] and [0080] of Kost as these paragraphs disclose pre-authoring and encoding and not re-encoding as required by Applicant's claim 1. Paragraph [0084] of Kost suggests that both the audio and video may be encoded, and this is subsequently confirmed when considering FIG. 1 of Kost, which is reproduced for the Examiner's convenience below:



In this above reproduced portion of FIG. 1, a single audio and video file is encoded to form separate audio 12b and video 12a. Accordingly, there is nothing in these cited portions of Kost to suggest that only the audio is encoded, as asserted by the Office Action. Kost, as previously noted in the amendment dated June 3, 2010, always encodes both the audio and the video, and therefore, the Office Action's reliance on Kost as teaching any audio-only encoding as one of the possibilities in the Kost system.

In the "Response to Arguments" section of the current Office Action, the Office Action explains the construction of this portion of Kost by stating that "paragraph [0084] of Kost discloses that the audio data (item 12b) may be encoded differently than the video data (item 12a) that is that there 'may' be an parameter set to encode the audio data and that there may be another parameter set to encode both the audio and the video data." Yet, Applicant can find nothing in Kost to so much as suggest the above noted Office Action's construction. Accordingly, the teaching of Kost is inconsistent with the interpretations advanced by the Office Action.

In addition, Kost provides no teaching that would have suggested what the Office Action refers to as "parameter sets." At best, Kost merely describes that encoding may be performed differently for audio and video data but does not suggest that these may be performed with respect to different parameter sets. In fact, the Office Action relies on various portions of Christopoulos, not Kost, when traversing the parameter sets recited by

claim 1. Kost, however, lacks any teaching to suggest parameter sets of any kind. For this reason alone, the Office Action's construction of Kost is inaccurate and improper.

It may be that the Office Action is attempting to suggest that Christopoulos in view of Kost would have suggested the parameter sets set forth in claim 1. Considering that Kost always teaches the encoding of both audio data and video data, the combination resulting from considering Christopoulos in view of Kost would only have provided for, at best, a third parameter set directed to encoding audio and video data. That the audio data may be encoded differently than the video data, results only in a different parameter set for encoding both audio and video data, **not** one for only encoding only audio data, contrary to the Office Action's assertions otherwise. In other words, Kost generally encodes both audio data and video data, and while the audio data may be encoded differently from the video data, this does not suggest that **only** audio data may be encoded according to one of the parameter sets.

Indeed, nothing in Kost so much as suggests any situation in which only the audio data is encoded. When Kost indicates in paragraph [0084] that "in addition to the video, the audio ***12b*** may be encoded," Kost is not indicating that audio data may be the only data encoded. To the contrary, this portion of Kost indicates that the audio data **may** be encoded, suggesting that only the video data is always encoded, while the audio data may or may not be encoded. Consequently, Christopoulos in view of Kost discloses, at most, that only the video data may be encoded or that both video and audio data may be encoded. Therefore, Kost lacks any teaching to suggest that only the audio data may be encoded without the video data, contrary to the Office Action's allegations otherwise. For these reasons, the Office Action's construction of Kost is improper as suggesting four different parameter sets.

Considering that Christopoulos in view of Kost discloses at most a parameter set for encoding video and audio and a parameter set for encoding video (ignoring, again for purposes of argument, whether transcoder hints may be properly considered as Applicant's parameter sets to one of ordinary skill in the art), Chritopoulos in view of Kost would at most only suggest three parameter sets. That is, Christopoulos, according to the Office Action, discloses a parameter set directed to encoding video data and another parameter set directed to encoding image data. Kost, when properly construed, teaches to encoding video

data and both video data and audio data, which when considered in view of Christopoulos may, again according to the Office Action's construction, suggest parameter sets directed to encoding video data and another parameter set for encoding both video and audio data. Assuming the Office Action's construction of Christopoulos in view of Kost is proper for the sake of argument, Christopoulos in view of Kost would only result in three parameters sets, considering that there are two parameter sets directed to encoding video when Kost is properly construed. This combination of references relied upon by the Office Action, therefore, fails to teach or suggest the four parameter sets required by claim 1.

None of the portions of Short and Mantha relied on by the Office Action in rejecting claim 1 overcome this deficiency of Christopoulos and Kost. Consequently, the combination resulting from Christopoulos in view of Kost, Short and Mantha fails to teach or suggest this feature of claim 1 directed to the four different parameter sets.

As yet another example, Christopoulos in view of Kost, Short and Mantha fails to teach or suggest an apparatus comprising both a customer manager and an encode manager. Claim 1 makes clear that these are separate managers that each provides different features. The customer manager, according to claim 1, determines a first user preference for selective re-encoding of a multimedia stream for a first user and a second user preference for selective re-encoding of the multimedia stream for a second user. The customer manager may, therefore, represent a manager that manages customers to determine user preferences associated with different users. The encode manager receives the multimedia stream and selects one of the plurality of encoding parameter sets in accordance with an encoding scheme, as recited by claim 1. Moreover, claim 1 is clear in that a single apparatus includes both of these managers.

In contrast to these requirements of claim 1, paragraph [0035] of Christopoulos teaches to a first device, i.e., server 110, that stores multimedia data alone with transcoding hints and then a second device, i.e., gateway 120, that includes a transcoder for transcoding the multimedia data in accordance with the transcoding hints. In this exemplary system, Christopoulos suggests that the server stores the transcodign hints while a separate device, i.e., gateway120, performs the transcoding. In this respect, the transcoder hints are stored and maintained by a first device separate from the device that performs the transcoding and maintains the preferences, characteristics, etc. used to form the transcoder hints, contrary to

the specific requirement of claim 1 that a single apparatus include both a customer manager and an encoder manager.

Applicant notes that there is good reason why the Christopoulos system stores the transcoder hints with the multimedia data on the server rather than storing the transcoder hints at gateway 120. It seems that the transcoder hints of Christopoulos are tied to the multimedia data or, in other words, that the transcoder hints are specific to the multimedia data. Thus, these transcoder hints only provide for multimedia specific hints that cannot be applied generally to any multimedia data that is received by the second device, i.e., gateway 120. For this reason, the preferred way of storing transcoder hints is to store them with the associated multimedia data. In this regard, the transcoder hints cannot be applied to any data received by the gateway device and lack the general applicability permitted by the techniques set forth in claim 1.

While these transcoder hints are multimedia specific, Christopoulos does note in paragraph [0036] that "the multimedia data and associated transcoder hints may not necessarily be stored in the manner illustrated in FIG. 2." Christopoulos continues to note the multimedia data-specific nature of the transcoder hints by stating that "[a]s long as the multimedia data is associated with the particular transcoder hints, this information can be stored in any manner." In this respect, the transcoder hints are specific to the multimedia data. Nevertheless, Christopoulos clearly states a preference for storing these transcoder hints on the server because these transcoder hints are specific to the multimedia data and cannot be generally stored at the gateway unless some undefined way of associating the multimedia data with the transcoder hints is provided. Based only on some vague teaching that transcoder hints could be store in any manner, one of ordinary skill in the art would not have read Christopoulos and arrived at the features of claim 1 directed to an apparatus comprises both a customer manager and an encode manager.

Continuing to examine Christopoulos, and specifically, paragraph [0038] of Christopoulos, it is clear that the gateway stores "client capabilities, user preferences, link characteristics and/or network characteristics." Yet, the transcoder of the gateway provides these various preferences, characteristics and capabilities to the server, which then generates the transcoder hints in the manner disclosed in paragraph [0038] of Christopoulos. This suggests that two separate devices are required as the transcoder of the gateway devices does not have sufficient capacity to actually determine these transcoder

hints itself. In this respect, the Christopoulos system necessarily involves two different devices, one for managing the above noted preferences, characteristics and capabilities, and another for producing the transcoder hints. This Christopoulos system is substantially different from the single apparatus of claim 1 that includes both the customer manager and the encoder manager.

The Office Action, in rejecting these features of claim 1, seems to have overlooked this requirement of claim 1. The Office Action indicates that paragraphs [0035], [0036]-[0038] and [0046] in combination with FIGS. 2, 3 and 5 disclose these features. Yet, the Office Action never addresses the features of claim 1 requiring a single apparatus that includes both of the customer manager and the encode manager. By not addressing these features of claim 1, the Office Action seems to have suggested that it would be trivial to combine the functionality of the server and the gateway disclosed by claim 1. Yet, as noted above, it would not be trivial to make this combination considering that Christopoulos indicates that transcoder hints are determined by the server with respect to requested multimedia data while the preferences, characteristics, etc. are stored on the different gateway device. Moreover, technically, combining the server with the gateway device would make little sense considering that there would then never be a need for an intermediate device, such as the gateway, to include the transcoder used by Christopoulos and described repeatedly throughout Christopoulos as offering numerous benefits. By glossing over a significant requirement of Christopoulos and suggesting a technically deficient combination, the Office Action has improperly rejected these features of Applicant's claim 1.

None of the portions of Kost, Short and Mantha relied on by the Office Action in rejecting claim 1 overcome this deficiency of Christopoulos. Consequently, the combination resulting from Christopoulos in view of Kost, Short and Mantha fails to reach this feature of claim 1.

The above arguments made above with respect to claim 1 apply to remaining independent claim 25, 49, 73, 80, 81, 93, 102 and 112. The arguments also apply to dependent claims 2-15, 17, 18, 20-24, 26-30, 32, 34-40, 42-48, 50-54, 56, 58-64, 66-72, 73-79, 84-86, 88-92, 94, 96, 98-101, 105, 106, 108-111, 115-131. To the extent the Office Action relies on various other references, including Vetro, Wang, Anand, Patterson and Tsukagoshi to rejection various ones of the above listed independent and dependent claims,

the portions of these references relied on by the Office Action do not overcome the deficiencies of Christopoulos in view of Kost, Shorth and Mantha noted above with respect to claim 1. Consequently, in each instance, the applied references fail to disclose or suggest the techniques defined by Applicant's claims, and provide no teaching that would have suggested an apparent reason for a person of ordinary skill in the art to arrive at the claimed techniques.

The dependent claims, however, also include additional features that are not taught or even suggested by the applied references and which further distinguish the techniques of these dependent claims from what is disclosed by the applied references. For example, currently amended claim 8 further requires that the encoder system re-encodes the received stream by re-encoding the decoded stream using the selected one of the plurality of encoding parameter sets for each of the first and second users to output the encoded stream differently for each of the first and second users with principles set forth by the respective encoding parameter set. That is, currently amended claim 8 requires encoding the same stream to output two different encoded streams for each of the first and second users. Nothing in any of the applied references teaches or suggests this feature of claim 8.

When rejecting this feature of claim 8, the Office Action returns, once again, to paragraphs [0036]-[0038] and [0046] in conjunction with FIGS. 3 and 5 of Christopoulos and alleges these cited portions of Christopoulos teach this feature of currently amended claim 8. This portion of Christopoulos merely suggests that transcoder hints are stored with its associated multimedia data and that these hints may be applied to transcode the multimedia data. In this cited portion of Christopoulos, Applicant can find no reference to transcoding the multimedia data twice to output two different encoded streams for two different users. At most, Christopoulos describes application of the Christopoulos techniques with respect to a single client. The remaining portions of the other applied references, i.e., Kost, Short and Mantha, relied on by the Office Action do not overcome this deficiency, even when considering in view of Christopoulos. Consequently, Christopoulos in view of Kost, Short and Mantha do not teach or suggest this feature of claim 8.

CONCLUSION

In summary, Applicant respectfully disagrees with various prior art interpretations advanced in the Office Action and applied to the former claims. Additional arguments those above may also exist, particularly with respect to the dependent claims.

Accordingly, in light of the arguments above, Applicant submits that the application is in condition for allowance, for which early action is respectfully requested.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,

Dated: 12-02-2010

By: /Campbell Chiang #56,518/
Campbell C. Chiang, Reg. No. 56,518

QUALCOMM Incorporated
Attn: Patent Department
5775 Morehouse Drive
San Diego, California 92121-1714
Telephone: 858-651-7951
Facsimile: (858) 658-2502